Constance E Stewart (Connie Stewart) Executive Director, California Center for Rural Policy Subcommittee on Public Lands May 23, 2017

Thank you so much Chairman McClintock and members of the Subcommittee on Federal Lands for allowing me to speak with you today.

My Name is Connie Stewart and I'm the Executive Director of the California Center for Rural Policy at Humboldt State University.

The Center conducts research to inform policy, build community, and promote the health and well-being of rural people and environments. We recognize the importance of broadband to rural communities, which is why since our inception in 2005 we have worked to improve both broadband deployment and adoption.

My organization has the honor of being the lead agency in a network named Redwood Coast Connect, which includes County Supervisors, Economic Development leaders and our regional Public Access Television. We also work closely with our region's 11 Federally Recognized Tribes and have worked to assure every community in our region has the broadband it needs. I'm here to urge you to support Congressman Huffman's HR 2425, the "Public Lands Telecommunication Act" and I would like to thank Congressman Huffman for introducing this important legislation. I know this legislation, if enacted, will make a big difference in helping rural communities working on deploying broadband to end the digital divide and I truly believe it will be a relief to federal employees permitting projects in rural communities.

Many rural regions in the US are segmented by a variety of telecommunication companies that each have their own territory, which means in rural areas they have small numbers of customers that generate small revenue streams that make it hard to justify the expense of upgrading services as the need for technology grows.

In fact, in my region of California, my organization looked at 100 communities and not one community's revenue stream justifies the capital improvements necessary to provide the level of service demand.

Why? Well, there are mainly three problems that make meeting the demand for broadband in rural communities extremely difficult:

- The lack of reliable backhaul, especially those in areas with lots of Federal Lands. The key to providing service in the unserved or underserved community is backhaul. In well-served areas, in many communities lack of route diversity that can be provided by middle mile backhaul is a reliability issue, with outages causing disruptions in Internet access, long distance calls, credit card processing and cellular service.
- The cost of permitting, especially if there are multiple Federal Land Management Agencies in the region. And;
- The difficulty of partnering with federal agencies on a regional basis, which means those federal agencies are losing out on improved connectivity opportunities that could enhance experiences of both staff and visitors to our federal parks and forests. Small rural communities rarely have any businesses larger than microenterprise size, but they may have government offices in communities not served by broadband. Federal Agency purchasing is generally with pre-negotiated contracts, which takes them out of the mix for aggregating demand. In some cases out West, it takes out the sole potential anchor tenant in a small community.

Congressman Huffman's Public Lands Telecommunications Act (H.R. 2425), is an important step in solving all three of these problems and enhancing service in rural communities across the country.

In 2007, California created an Advance Services Fund administered by the Public Utilities Commission to provide grants to bridge the "digital divide" in unserved and underserved areas, which are mostly in rural communities.

In 2009, our region created a plan to build a fiber middle mile backbone system that could offer reliable service to any of the 100 communities. The reason we have focused on building a fiber middle mile is to create a telecommunication infrastructure foundation with unlimited expansion capacity to effectively adapt to future needs.

Many other rural communities like ours throughout California created similar plans, and have built middle-mile fiber that required right of way permits through disturbed areas of Federal Lands either near existing highways or existing utilities routes.

Let me briefly discuss challenges faced by a couple of those broadband projects to illustrate the importance of HR 2425:

Digital 395, is a 583-mile fiber optic network that was built between Barstow, CA and Carson City, NV. The project encompassed 36 rural and remote communities, six Indian reservations, two military bases, over 25,000 households and 2,500 businesses.

The \$109 million project was mostly funded by the Broadband Technology Opportunities Program (BTOP) project, administered by National Telecommunications and Information Administration (NTIA) to help bridge the technological divide; create jobs; and improve education, health care, and public safety in communities across the country.

\$23 million dollars of the project went to permitting, which included \$1.5 million in right-of-way fees, and \$18 million was spent on mitigation and environmental studies although the fiber build mostly occurred in disturbed areas along the Highway 395 corridor.

The lead federal agency was the NTIA, however there were a total of 54 agencies in total involved in permitting, including Federal Land Management Agencies—three separate Bureau of Land Management offices, Bureau of Indian Affairs in two states on behalf of seven Tribes, US Forest Service in two separate forest and the Department of Defense for two separate military bases. The Federal Resource Management Agencies involved included US Fish and Wildlife Service and the Army Corps of Engineers.

To quote the President of the company, "The permit process, although not contested by even one intervener, took 24 months to complete, while the entire project construction of 648 miles trenching took only 17 months to complete. Therein lies some empirical proof that the permitting bureaucracy is more difficult to penetrate than granite".

Each agency not only had its own processes and procedures, but they also had different requirements to meet their own interpretations of NEPA and the National Historic and Preservation Act (Section 106). This forced the project to execute a very costly Programmatic Agreement between 23 signatories to find commonality.

Most staff in those agencies had never permitted a major fiber build and leaned on the side of extreme caution.

As with most things in life the first one is hard and the next one is easy.

But here's the thing—it's not likely that many of those agency staffers will be involved in future fiber builds and so much of the lessons learned on that project will not be used again.

The HR 2425 provision providing fee retention authority for rights-of-way and other telecommunications infrastructure use would ensure funds are reinvested to further broadband and telecommunications deployment in other areas.

In addition, federal agencies requested that the Digital 395 project provide a connection to federal offices at a cost of several millions of dollars, however none of the federal agencies subscribed to the service because they were unable to enter into a cooperative agreement leaving millions of dollars of stranded infrastructure and investment. Passage of HR 2425 would change that.

The Redwood Coast of California recently received a grant from the state's Advance Services Fund for a similar project, which is referred to as Digital 299.

Digital 299, a middle-mile fiber build will connect as many as 102 schools, colleges, research institutions, hospitals, clinics, public safety, tribal lands, and other Community Anchor Institutions (CAIs). The project area covers almost 2,400 square miles of rural Northern California between Redding and the California coast, an area the size of New Jersey and Connecticut.

Without the fee retention and cooperative agreement authority that HR 2425 would provide, our upcoming 221-mile fiber build will likely experience similar permitting hurdles and challenges including:

- (1) Multiple agencies managing a common telecommunication project and process
- (2) Duplicative work by project proponents having to coordinate across multiple agencies that do not have the resources to work together cooperatively on telecommunication projects.
- (3) Delays due to lack of staff experience and under resourcing for permitting at the local level.
- (4) Each project or environmental issue treated as a "one off" event, rather than a series of prescribed mitigations.

Just a couple of other notes: Currently, federal agencies handle all aspects of the project at the same time, delaying when the project can start. Many projects do have phases—such as fiber builds and wireless towers, which locations are more flexible. We believe that over 90 percent of these projects can be initiated at the outset, with parts following up in subsequent phases. For example, if towers require further studies, you don't need to hold up construction of the fiber build.

Thank you for giving me an opportunity to testify today. Mr. Chairman, with your permission I am submitting my entire statement for the record and I am happy to answer any questions. Thank you.